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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/029,772	12/21/2001	Huayan Wang	1273	4705
23720 7590 09/13/2007 WILLIAMS, MORGAN & AMERSON 10333 RICHMOND, SUITE 1100 HOUSTON, TX 77042			EXAMINER CHANKONG, DOHM	
			ART UNIT 2152	PAPER NUMBER
			MAIL DATE 09/13/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/029,772

Applicant(s)

WANG ET AL.

Examiner

Dohm Chankong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3, 6-12 and 15-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-12 and 15-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1> This action is in response to Applicant's request for continued examination, filed 8.10.2007. Claims 1, 10, and 23 are amended. Claims 4, 5, 13, and 14 are canceled. Thus, claims 1-3, 6-12 and 15-28 are presented for further examination.

2> This is a non-final rejection.

#### *Continued Examination Under 37 CFR 1.114*

3> A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8.10.2007 has been entered.

#### *Response to Arguments*

4> Applicant's arguments with respect to claims 1-3, 6-12, 15-17, 21, 22, 27, and 28 have been considered but are moot in view of the new ground(s) of rejection. However, the rejection of claims 18-20 and 23-26 are maintained. Vaghi discloses the claimed limitation where the barcode includes information relating to the physical characteristics of the envelope, wherein the information includes: the weight of the security envelope [abstract]. In addition, Moore also discloses the newly incorporated limitations [col. 8, lines 50-66 ("generating a unique pattern comprising an encoded input data entry stored on a mass storage device accessible by

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a CPU where the input data comprises...a unique mailpiece weight, and time and date information”)].

Claim Rejections - 35 USC § 103

5> The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6> Only those claims that have been substantively amended by Applicant are formally addressed in this action. For the substance of the rejection of those claims not formally addressed, refer to the final rejection, filed on 4.12.2007, herein incorporated by reference.

7> Claims 1-3, 6, 7, 10-12, 15, 18-21, and 23-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Critelli, US 6,260,029 in view of Cantu et al, U.S Patent Publication No. 2001|0020228 [“Cantu”], in further view of Moore, U.S Patent No. 5,917,925.

8> As per claim 1, Critelli teaches a security envelope, comprising: a barcode in a two-dimensional symbology located on the security envelope, the barcode encoding (Fig 8, item 38):

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a public component (shipping information, postal verification information, Col. 4, lines 10-15; Fig. 1, item 36; Fig 8, item 38), comprising a digital signature signed by the sender encrypted by the private key of the sender (Col. 3, lines 1-5); and

a private component (non-shipping information, advertising material, Col. 3, lines 47-57), comprising a digital signature signed by the sender (Col. 2, lines 60 – Col. 3, lines 5; Col. 3, lines 47-66; Col. 4, lines 1-14).

Critelli does not explicitly teach (1) a private component, encrypted by the public key of the receiver or (2) that the barcode further encodes information relating to the physical characteristics of the security envelope, wherein the physical characteristics of the security envelope include at least one of the date the security envelope was sealed, the size of the security envelope, or the weight of the security envelope.

As to (1), in a similar system dealing with encryption, Cantu teaches a public component that comprising a digital signature signed by the sender encrypted by the private key of the sender [0055-0061] and a private component comprising a digital signature signed by the sender encrypted by the public key of the receiver [0055-0061]. Cantu teaches specifically that a sender encrypts a message with the recipient's public key to "provide the recipient with assurance that the message is indeed intended for the recipient." Cantu also teaches encrypting the message with the sender's private key to "assure the recipient the identity of the sender." Cantu further discloses that such encryption techniques can be applied to barcodes [0101].

Thus, it would have obvious to one of ordinary skill in the art to incorporate Cantu's encryption techniques into Critelli's barcode system. In particular, it would have been

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obvious to incorporate Cantu's teaching of utilizing both a recipient's public key and a sender's private key to encrypt a barcode and to provide assurances to both the recipient and sender that the message is secure.

As to (2), Moore discloses a barcode further encodes information relating to the physical characteristics of the security envelope, wherein the information includes at least one of:

- a. the date the security envelope was sealed;
- b. the size of the security envelope; or
- c. the weight of the security envelope [col. 8, lines 50-66].

Moore discloses that encoding the weight of the envelope into the barcode helps in the reduction of counterfeiting. Therefore, it would have been obvious to one of ordinary skill in the art to incorporate the functionality of encoding weight into a barcode into Critelli's barcode system.

9> As to claim 10, Critelli discloses a method for securing mail, comprising:

producing a digital mail identification that encodes physical identification information of a security envelope into a barcode in a two-dimensional symbology [Col. 4, lines 10-15 | Fig. 1, item 36 | Fig 8, item 38 | column 2 «lines 35-50» where : Critelli discloses encoding physical information such as the date when the envelope was mailed (see Applicant's specification, pg. 9 «lines 1-2»)], wherein the digital mail identification comprises:

a public component, the public component comprising a public digital mail identification and a digital signature signed by a sender and encrypted by the private

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key of the sender [column 2 «lines 35-50» | column 3 «lines 1-5» | see also rejection of claim 1]; and

a private component, the private component comprising a private digital mail identification and a digital signature signed by the sender and encrypted by the public key a receiver [column 2 «lines 35-50» | column 3 «lines 47-66» | column 4 «lines 1-14» | see also rejection of claim 1];

applying the digital mail identification to the security envelope [column 2 «lines 35-50»].

Critelli does not expressly disclose that the barcode further encodes information relating to the physical characteristics of the security envelope, wherein the physical characteristics of the security envelope include at least one of the date the security envelope was sealed, the size of the security envelope, or the weight of the security envelope.

Moore discloses a barcode further encodes information relating to the physical characteristics of the security envelope, wherein the information includes at least one of:

- d. the date the security envelope was sealed;
- e. the size of the security envelope; or
- f. the weight of the security envelope [col. 8, lines 50-66].

Moore discloses that encoding the weight of the envelope into the barcode helps in the reduction of counterfeiting. Therefore, it would have been obvious to one of ordinary skill in the art to incorporate the functionality of encoding weight into a barcode into Critelli's barcode system.

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10> As to claim 23, it is rejected for the same reasons as rejection to claim 1, 10, 18 above.

Additionally, Critelli teaches at least one mobile computer comprising:

a bar code reader, a physical authentication identifier reader, computer capable of comparing information obtained from the bar code reader and the physical authentication identifier reader, a database capable of storing at least one public key and at least one private key, a display and a printer [Figure 4 | column 6 «lines 55-67»].

11> Claim 8, 9, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Critelli, Cantu and Moore, as applied to claim 1, further in view of Applicant Admitted Prior Art (hereinafter AAPA).

12> Claims 22 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Critelli,, Cantu, Moore and in further view of 'Official Notice'.

13> Claims 1-7, 10-15, 18, 19, 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Critelli, US 6,260,029 in view of Cantu et al, U.S Patent Publication No. 2001|0020228 ["Cantu"], in further view of Vaghi et al, U.S Patent No. 6,571,22 ["Vaghi"].

14> As per claim 1, Critelli teaches a security envelope, comprising: a barcode in a two-dimensional symbology located on the security envelope, the barcode encoding (Fig 8, item 38):



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a public component (shipping information, postal verification information, Col. 4, lines 10-15; Fig. 1, item 36; Fig 8, item 38), comprising a digital signature signed by the sender encrypted by the private key of the sender (Col. 3, lines 1-5); and

a private component (non-shipping information, advertising material, Col. 3, lines 47-57), comprising a digital signature signed by the sender (Col. 2, lines 60 – Col. 3, lines 5; Col. 3, lines 47-66; Col. 4, lines 1-14).

Critelli does not explicitly teach (1) a private component, encrypted by the public key of the receiver or (2) that the barcode further encodes information relating to the physical characteristics of the security envelope, wherein the physical characteristics of the security envelope include at least one of the date the security envelope was sealed, the size of the security envelope, or the weight of the security envelope.

As to (1), in a similar system dealing with encryption, Cantu teaches a public component that comprising a digital signature signed by the sender encrypted by the private key of the sender [0055-0061] and a private component comprising a digital signature signed by the sender encrypted by the public key of the receiver [0055-0061]. Cantu teaches specifically that a sender encrypts a message with the recipient's public key to "provide the recipient with assurance that the message is indeed intended for the recipient." Cantu also teaches encrypting the message with the sender's private key to "assure the recipient the identity of the sender." Cantu further discloses that such encryption techniques can be applied to barcodes [0101].

Thus, it would have obvious to one of ordinary skill in the art to incorporate Cantu's encryption techniques into Critelli's barcode system. In particular, it would have been

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obvious to incorporate Cantu's teaching of utilizing both a recipient's public key and a sender's private key to encrypt a barcode and to provide assurances to both the recipient and sender that the message is secure.

As to (2), Vaghi discloses a barcode further encodes information relating to the physical characteristics of the security envelope, wherein the information includes at least one of:

- g. the date the security envelope was sealed;
- h. the size of the security envelope; or
- i. the weight of the security envelope [abstract].

Vaghi discloses that encoding the weight of the envelope into the barcode enhances office efficiency and reduces costs. Therefore, it would have been obvious to one of ordinary skill in the art to incorporate the functionality of encoding weight into a barcode into Critelli's barcode system.

15> As to claim 10, Critelli discloses a method for securing mail, comprising:

producing a digital mail identification that encodes physical identification information of a security envelope into a barcode in a two-dimensional symbology [Col. 4, lines 10-15 | Fig. 1, item 36 | Fig 8, item 38 | column 2 «lines 35-50» where : Critelli discloses encoding physical information such as the date when the envelope was mailed (see Applicant's specification, pg. 9 «lines 1-2»)], wherein the digital mail identification comprises:

a public component, the public component comprising a public digital mail identification and a digital signature signed by a sender and encrypted by the private

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key of the sender [column 2 «lines 35-50» | column 3 «lines 1-5» | see also rejection of claim 1]; and

a private component, the private component comprising a private digital mail identification and a digital signature signed by the sender and encrypted by the public key a receiver [column 2 «lines 35-50» | column 3 «lines 47-66» | column 4 «lines 1-14» | see also rejection of claim 1];

applying the digital mail identification to the security envelope [column 2 «lines 35-50»].

Critelli does not expressly disclose that the barcode further encodes information relating to the physical characteristics of the security envelope, wherein the physical characteristics of the security envelope include at least one of the date the security envelope was sealed, the size of the security envelope, or the weight of the security envelope.

Vaghi discloses a barcode further encodes information relating to the physical characteristics of the security envelope, wherein the information includes at least one of:

- j. the date the security envelope was sealed;
- k. the size of the security envelope; or
- l. the weight of the security envelope [abstract].

Vaghi discloses that encoding the weight of the envelope into the barcode enhances office efficiency and reduces costs. Therefore, it would have been obvious to one of ordinary skill in the art to incorporate the functionality of encoding weight into a barcode into Critelli's barcode system.

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16> As per claim 18, Critelli and Cantu do not explicitly teach the claimed limitations.

Vaghi discloses:

measuring the physical identification information [column 2 «lines 15-24» : weighing an item];

decoding the digital mail identification [abstract : weight encoded as a barcode on the package]; and

comparing the measured physical identification information with the decoded digital mail identification [column 6 «lines 11-24»].

It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of Critelli, Cantu and Vaghi because Vaghi's teaching simplifies Critelli and Cantu's shipping system by encoding physical information, such as weight of a package within a barcode which enables easier verification and checking of heavy or unusual sized packages.

17> As per claim 23, claim 23 is rejected for the same reasons as rejection to claim 1, 10, 18 above.

18> Claim 8, 9, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Critelli, Cantu and Vaghi, as applied to claim 1, further in view of Applicant Admitted Prior Art (hereinafter AAPA).

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*Conclusion*


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dohm Chankong whose telephone number is 571.272.3942.

The examiner can normally be reached on Monday-Friday [8:30 AM to 4:30 PM].

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571.272.3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DC

  
BUNJOB JAROENCHONWANIT  
SUPERVISORY PATENT EXAMINER

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